UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/619,620	07/16/2003	Byung-Jin Kim	1630-0384PUS1	7305	
2292 7590 07/09/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 EALLS CHURCH, VA 22040, 0747			EXAMINER		
			BOCCIO, VINCENT F		
FALLS CHURCH, VA 22040-0747			ART UNIT	PAPER NUMBER	
			2158		
			NOTIFICATION DATE	DELIVERY MODE	
			07/09/2009	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

	Application No.	Applicant(s)					
	10/619,620	KIM ET AL.					
Office Action Summary	Examiner	Art Unit					
	Vincent Boccio	2158					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	Lely filed the mailing date of this communication. (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 18 Ju	ne 2009						
·= · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·						
<i>,</i> —	· -						
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4)⊠ Claim(s) <u>20,23,24,27-29,32-34,37-39,42-44 an</u>	d 47-51 is/are pending in the app	lication.					
• • • • • • • • • • • • • • • • • • • •	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
, <u> </u>	6) Claim(s) 20,23,24,27-29,32-34,37-39,42-44 and 47-51 is/are rejected.						
7) Claim(s) is/are objected to.	<u></u>						
8) Claim(s) are subject to restriction and/or	election requirement.						
Application Papers	·						
··· <u> </u>							
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
TT) The datifor declaration is objected to by the Ex-	anniner. Note the attached Office	Action of form PTO-152.					
Priority under 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of 	s have been received. s have been received in Applicati ity documents have been receive (PCT Rule 17.2(a)).	on No. <u>09/245,855</u> . ed in this National Stage					
Attachment(s)	o.□	(770.440)					
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) ∐ Interview Summary Paper No(s)/Mail Da						
3) Information Disclosure Statement(s) (PTO/SB/08)	5) 🔲 Notice of Informal P						
Paper No(s)/Mail Date	6) Other:						

Application/Control Number: 10/619,620 Page 2

Art Unit: 2158

DETAILED ACTION

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2158

Response to Arguments

- 1. Applicant's arguments filed 6/18/2009 against all amended claims have been fully considered but they are not persuasive.
- {A} In re pages 9-10 applicant states,

"In particular, independent claim 20 has been amended to clarify that selectively recording the seamless presentation information for a corresponding object only when the current object is to be presented seamlessly with the previous object based on a result of the determination.

"As discussed during the interview, Taira et al. is directed to handling movies in which the camera angles are changed. The seamless angles described in Taira et al. correspond to when the angle of the camera is changed (i.e., a different camera is selected) to show a continuous scene."

In response the examiner respectfully agrees with the above.

Application/Control Number: 10/619,620

Art Unit: 2158

After a careful consideration of the recited claims and the references applied the examiner cites other supporting areas thereby expanding the showings of Taira, see below.

Page 3

Tiara handles Objects, being Video, as Still, but, also handles still.

Tiara is seen as a system, that teaches

o determining whether a current object of the picture data is to be presented seamlessly or non-seamlessly with a previous object of the picture data,

and

selectively recording the seamless presentation information for a corresponding object only when the current object is to be presented seamlessly with the previous object based on a result of the determination,

while claim 20 is directed to:

20. (Currently Amended) A method for <u>creating seamless</u> <u>presentation information</u> of picture data in a recording medium, the method comprising:

Therefore, Taira reads on the reads on the recited, either by first recording, and/or later editing the flags, or presentation sequences or play lists and/or setting preferences, Angles or other.

Taira et al., US 20030113096

Multi-screen display system for automatically changing a plurality of simultaneously displayed images

[0011] When the <u>editor (producer) records</u> the conventionally edited concert video title as one angle picture sequence, the <u>user</u> can select that angle picture sequence. In this case, however, the <u>user</u> must always watch identical picture sequence, and may lose interest in such title soon after repetitive watching.

[0012] In case of single-angle recording, if there are a plurality of angles that the <u>user</u> wants to watch, the <u>user</u> can neither arbitrarily select and watch his or her desired angle nor mask an angle that he or she does not want to watch and select and watch other angles.

[0013] Furthermore, if there are a plurality of angles that the user wants to watch, he or she can neither alternately or randomly and automatically select and watch only those angles nor mask (skip) an angle that he or she does not want to watch and automatically select and watch other angles.

[0473] Upon displaying the full screen and three popup windows, a movie of current angle number AGLN (in the example of the upper image in FIG. 42, AGLx=#1) selected as the angle to be played back is displayed on the full screen, **the still image of the first non-selected angle number (**AGLy1=#2 in the example of the upper image in FIG. 42) is displayed on the first window frame, the **still image of the second non-selected angle number (AGLy2=#3 in the example of the upper image in FIG. 42) is displayed on the second window frame, and the still image of the third non-selected angle number (AGLy3=#4 in the example of the upper image in FIG. 42) is displayed on the third window frame.**

[0498] Disk drive 30 rotates DVD disk 10 set on a tray (not shown) of the playback apparatus main body, and reads out, from DVD disk 10, recording data (main picture data containing *movie information and still image information/video data*, subpicture data containing superimposed dialogue information and menu information, audio data containing audio information, navigation data for implementing playback control that the DVD disk provider intended, and the like). Readout data are subjected to signal processing such as signal demodulation, error correction, and the like in disk drive 30, and are sent as a data sequence in the pack format (see FIG. 7) to system processor 54.

[0516] When picture data decoded by video decoder 58 corresponds to a menu portion of a movie, sub-picture data normally corresponds to characters that form

Art Unit: 2158

menus and a user selection button (to be highlighted as needed). In this case, the background (still image or movie) of the menu is displayed based on the picture data on monitor display 6, and a button, the display state of which changes in correspondence with user selection operation, is superimposed based on the subpicture data on the background image.

[0520] This frame memory 642 can be used when picture data output from video decoder 58 is frozen as a still image and the still image is sent to monitor display 6 until the target chapter begins to be played back in, e.g., a chapter search or the like.

[0566] <16> When the cell playback mode of the disk is switched to a still mode during playback, playback made so far is canceled, and a still image is played back.

The primary examiner recommends to, amend the claims to more specific operations and timing, if so have support the claims read on editing after recording, as taught by the art applied.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made. This application currently names joint inventors. considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2158

2. Claims 20, 23-24, 27-29, 32-34, 37-39, 42-44 and 47-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashiwagi et al. (US 5,923,869) in view of Taira et al. (US 2003/0113096) and Okada et al. (US 6,181,870).

Regarding claims 20, 27, 32, 37, 42, Kashiwagi discloses and meets the limitations associated with a method and associated apparatus for creating seamless presentation information of picture data in a record medium, comprising the steps of:

- a) recording picture data being received on the record medium by grouping the data into objects (Figs. 2, 20 and 24); and
- b) selectively creating the seamless presentation information (col. 43, line 35-, col. 44, line 12-, "target scene to be seamlessly connected to the preceding scene based on scenario data St7", col. 34, lines 24-64, "seamless Playback") for each object based on the type of picture data being recorded.

Regarding claims 20, 23, 32, 37, 42 Kashiwagi fails to disclose as argued that amended to claim language below,

- o determining if a current object of the picture data is to be presented seamlessly or non-seamlessly with a previous object of the picture data; and
- o creating the seamless presentation information for each corresponding object only when the determining step determines the current object of the picture data is to be presented seamlessly with the previous object and not creating the seamless presentation for the current object when the determining step determines the current object of the picture data is not to be presented seamlessly with the previous object such that the seamless presentation information includes a different structure based on whether or not the current object is to be presented seamlessly or non-seamlessly with the previous object.

Taira et al. teaches determining if a current object of the picture data is to be presented seamlessly (e.g. Fig. 19, seamless address table) **or** non-seamlessly (Fig. 13, "NON-seamless") with a previous object of the picture data; and **creating the seamless presentation information** for each

Application/Control Number: 10/619,620

Art Unit: 2158

corresponding object only when the determining step determines the current object of the picture data is to be presented seamlessly (based on the tables with flags, part of DSI, Fig. 17, DSI in "nav._PCK(#n)", nav. Pack in Fig. 16 of a VOBU or Object (video object unit)) with the previous object and not creating (Fig. 31, "toggle") the seamless presentation for the current object when the determining step determines the current object of the picture data is not (Fig. 28, seamless playback flag) to be presented seamlessly with the previous object such that the seamless presentation information includes a different structure (flag value, and/or different angle) based on whether or not the current object is to be presented seamlessly or non-seamlessly with the previous object (a flag or angle change or Fig. 41, steps st52, st54, size different).

Page 7

Fig. 10, "Angle ... Non-Seamless", PCI, Fig. 11, comprises PCI_GI (general information), having PMT (s), Time Data, LBNs etc.....

Fig. 17, "Angle ... Seamless", playback information, DSI, Fig. 8, DSI_GI (general information), having SCR, LBN, Address Data and time,

Fig. 19, SML Seamless (angle),

Fig. 27, Cell Still Time

being PCI, DSI contents, presentation and search information for objects, video and/or still, depending on how handled, as those skilled in the art would understand, see pages 16-18, Figs. 28, 35, 39, 41, 44 (still, **seamless**, **flag= 1**??), thereby allowing for a plurality of angles or scenes can be played back can be changed and selectively played back, as taught by Taira.

Therefore, it would have been obvious to those skilled in the art at the time of the invention to modify Kashiwagi by incorporating determining if a current object of the picture data is to be presented seamlessly or non-seamlessly with a previous object of the picture data; and creating the seamless presentation information for each corresponding object only when the determining step determines the current object of the picture data is to be presented seamlessly with the previous object and not creating the seamless presentation for the current object when the determining step determines the current object of the picture data is not to be presented seamlessly

Application/Control Number: 10/619,620 Page 8

Art Unit: 2158

with the previous object such that the seamless presentation information includes a different structure based on whether or not the current object is to be presented seamlessly or non-seamlessly with the previous object, as taught by Taira Abe.

The combination as applied with above with <u>Kashiwagi further</u> <u>fails</u>, to address and particularly disclose, wherein the seamless presentation data includes a last system clock reference field of a former of two successive objects and a first system clock reference of a latter of the two successive objects.

Okada teaches at col. 42, lines 10-23, "first and last SCR of the former VOB and latter VOB, the seamless flag ... into the seamless linking information for the former VOB", as taught by Okada.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the combination and/or with **Kashiwagi** by incorporating first and last SCR values into the SCR field, being related to the former and latter respectively, of two successive objects, as taught by **Okada**, thereby providing more resolution of time information to utilize during reproduction operation as taught by Okada, as is deemed obvious to utilize known management structures in the same field of endeavor, as is obvious to those skilled in the art.

Regarding claims 23-24, the combination with Kashiwagi further meets the limitations of seamless information is included in the Navigation information pertaining to each object (Fig. 20, "NV", "DSI", "Seamless Playback {SML_PBI} and Angle Info for Seamless {SML_AGLI}"), which include Flags (such as shown in Fig. 20, also see related disclosure col. 21, line 30-, "seamless playback flag SPF", etc.......).

Claims 29, 33-34, 38-39, 43-44, 47-51 have been analyzed and discussed with respect to the claims above.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the

Art Unit: 2158

invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 20, 23-24, 27-29, 32-34, 37-39, 42-44, 47-51 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Taira et al.(US 2003/0113096).

Regarding claims 20, 23-24, 27-29, 32-34, 37-39, 42-44, 47-51 based on the above and in view of: Figs. 16-18, "NV, DSI, PCI, Seamless, Search", Fig. 21, "NON", Figs. 26-27, "Time, Start, First & Last, End, First, Last, CELL STILL TIME, Seamless Playback Flag, Seamless Angle Change Flag", Fig. 28, Seamless & STC, flags Figs. 31-32 etc., "Perm./Proh. Flags", set-able Pages 16-18 etc., is deemed to anticipate the claims as recited.

The examiner also incorporates by reference the details of Taira, as described, there above.

Conclusion

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP \S 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Application/Control Number: 10/619,620 Page 10

Art Unit: 2158

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications should be directed to the examiner of record Vincent F. Boccio whose telephone number is (571) 272-7373.

The examiner can normally be reached on between Monday-Thursday between (7:30 AM to 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ali, can be reached on (571) 272-4105.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system:

"http://portal.uspto.gov/external/portal/pair"

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vincent F. Boccio/ Primary Examiner